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Bailey et al.

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[54] **MULTIFOCUS INTRAOCULAR LENS**

[76] Inventors: **Kelvin E. Bailey**, 1100 Greentree Ct., Lexington, Ky. 40502; **Daniel B. Pope**, 203 69th St., NW., Bradenton, Fla. 33529

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[52] **U.S. Cl.** **623/6**

[58] **Field of Search** 623/6

[56] **References Cited**

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Primary Examiner—V. Millin

Attorney, Agent, or Firm—Finnegan, Henderson, Farabow, Garrett & Dunner

[57] **ABSTRACT**

An intraocular lens that internally alters its focal length with the position of the eye with respect to the horizontal. The lens is comprised of a solid transparent material having a hollow lenticule that encompasses the optical zone of the eye. The lenticule is connected with fluid reservoirs above and below it, and the reservoirs also are interconnected by channels on both sides of the lenticule. By moving fluids of different indices of refraction through the lenticule, the lens can be made to change its power. When the eye is in the horizontal position, the index of refraction of the fluid occupying the lenticule is such that distant objects are in focus, and when the eye is inclined 45°–90° from the horizontal as for reading, the index of refraction of a different fluid occupying the lenticule is such that near objects are in focus.

9 Claims, 10 Drawing Figures